

ABSTRACT

***TRYPTOPHAN AS A FUNCTIONAL REPLACEMENT FOR ADP-RIBOSE-
ARGININE IN RECOMBINANT PROTEINS***

5 A method is disclosed for producing a polypeptide with a modified activity or
stability, by replacing an arginine residue capable of being ADP-ribosylated with a
tryptophan or a phenylalanine. In one embodiment, compositions are provided that
include polypeptides, such as alpha defensin, with arginine-to-tryptophan or arginine-
to-phenylalanine substitutions, where the arginine residue is capable of being ADP-
10 ribosylated. In another embodiment, methods are disclosed for modifying an immune
response in a subject.